

## Patent Abstracts of Japan

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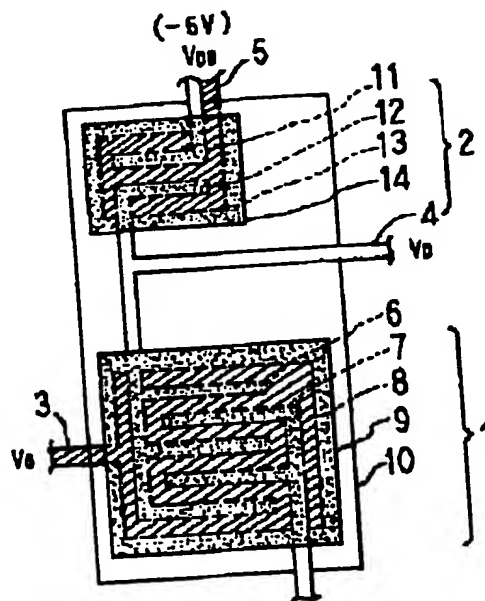
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INT.CL. : H01L 29/28 H01L 21/336 H01L 29/784  
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TITLE : INVERTER



ABSTRACT : PURPOSE: To make an inexpensive inverter at high integration degree on a large-area board by constituting an active layer of at least one side of a switching element and a load element out of an organic compound having semiconductor properties.

CONSTITUTION: For an active layer 9, anything will do so long as it may be an organic compound which has semiconductor characteristics, for example it can be made of a charge transfer complex or the like (or the combination of these compounds) of each kind of low polymer or high polymer of a kind of polyphylene, a kind of metallic polyphiline, a kind of metallic phthalocyanine, or the like. As the method of making the active layer 9 consisting of an organic semiconductor, vacuum deposition method, molecular beam epitaxial growth method, ion cluster beam method, or the like is select according to the material. Next, similar to a switching element 1, the basic structure of the load element 2, where the active layer 14 is constituted of an organic semiconductor film, is the same as the switching element 1. Hereby, an inverter wide in application range can be gotten, using a semiconductor which is simple in process and inexpensive.

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